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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,934	01/03/2001	David Allen Peterson	068945.1	1718

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EXAMINER
MAURO JR, THOMAS J

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 04/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE f this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _03 January 2001_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under _Ex parte Quayle_, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on _03 January 2001_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _4_.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-20 are pending and are presented for examination. A formal action on the

merits of claims 1-20 follows.

Drawings

2.   The drawings are objected to under 37 CFR 1.83(a). The drawings must show every

feature of the invention specified in the claims. Therefore, the different sessions between a

plurality of clients, the apportionment of memory for a session and the overall operation of the

method steps must be shown or the feature(s) canceled from the claim(s). No new matter should

be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office

action to avoid abandonment of the application. The objection to the drawings will not be held

in abeyance.

Claim Objections

3.   Claims 13-20 are objected to because of the following informalities: they depend off of a

method claim, but instead recite in the claims, "the thin client computer of claim ..." These

claims should be corrected to read, "The method of claim..." Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this
> or a foreign country, before the invention thereof by the applicant for a patent.

5.   Claims 1-3, 5, 7, 12-13, 15 and 17-18 are rejected under 35 U.S.C. 102(a) as being

anticipated by Haviv et al. (WO 99/40520).

With respect to claim 1, Haviv teaches a thin client computer comprising:

a local storage device associated with the thin client computer for storing an operating

system, wherein the operating system starts the thin client computer **[Haviv -- Figures 2A and**

2B, Page 12 lines 19-25 and Page 12 lines 31-36 – Page 13 lines 1-10 – Plug-in card contains

onboard memory storing operating system (OS) for booting the thin client OS];

a display **[Haviv -- Figure 1 and Page 11 line 18 - Display]**;

a downloading device for retrieving the desktop from the server computer wherein the

desktop is displayed on the display **[Haviv -- Figures 2B and 4, Page 11 lines 32-34, Page 13**

lines 32-34 and Page 16 lines 8-15 – Server downloads graphical user interface (GUI)

containing icons, i.e. desktop, to client, i.e. display],

wherein the operating system and the server software control operation of the thin client

computer by way of managing a session operative at the server **[Haviv -- Figure 3 and Page 13**

lines 10-12, Page 14 lines 14-20, Page 15 lines 27-28 and Page 16 lines 8-15 – Client is

controlled by thin client OS and server software which provides application and software

via the connection between the client and server, i.e. session]; and

wherein the operating system supports input and output devices for the thin client

computer **[Haviv -- Page 14 lines 21-30 – Operating system allows access to display, mouse,**

keyboard, etc., i.e. input/output devices, for thin client mode].

With respect to claim 2, Haviv further teaches wherein the operating system cannot alone

operate the thin client computer **[Haviv -- Page 11 lines 22-26, Page 13 lines 20-22, Page 15**

lines 14-28 and Page 16 lines 8-15 – Operating system contains no programs or

applications. Its purpose is to initiate a network connection to server in order for the user

to utilize the computer].

With respect to claim 3, Haviv further teaches wherein the connection to the server is

made via a network interface card on the computer to a local area network (LAN) **[Haviv --**

Figure 1 and Page 11 lines 32-34 – Computer is connected to server through a network

adapter over a LAN].

With respect to claim 5, Haviv further teaches a hard drive and diskette drive as an

input/output device **[Haviv -- Figure 1 and Page 11 line 20]**.

With respect to claim 7, Haviv further teaches wherein software applications are resident

on the server computer and are downloaded to the client computer for use during an operating

session [**Haviv -- Figures 3 and 4, Page 11 lines 32-34, Page 14 lines 14-15 and Page 16 lines 8-15 -- Applications and various software programs reside on server and are downloaded to the client upon its connection, i.e. session, to server**].

With respect to claim 12, Haviv teaches a method for operating a thin client computer comprising:

booting the thin client computer using the operating system [**Haviv -- Figures 2A and 2B, Page 12 lines 19-25 and Page 12 lines 31-36 -- Page 13 lines 1-10 -- Plug-in card contains onboard memory storing operating system (OS) for booting the thin client OS**];

retrieving the desktop from the server computer, wherein the desktop is displayed on the display [**Haviv -- Figures 2B and 4, Page 11 lines 32-34, Page 13 lines 32-34 and Page 16 lines 8-15 -- Server downloads graphical user interface (GUI) containing icons, i.e. desktop, to client, i.e. display**],

controlling the thin client computer by managing a session between the thin client computer and the server computer [**Haviv -- Figure 3 and Page 13 lines 10-12, Page 14 lines 14-20, Page 15 lines 27-28 and Page 16 lines 8-15 -- Client is controlled by thin client OS and server software which provides application and software via the connection between the client and server, i.e. session**]; and

operating the input and output devices by way of the operating system [**Haviv -- Page 14 lines 21-30 -- Operating system allows access to display, mouse, keyboard, etc., i.e. input/output devices, for thin client mode**].

With respect to claims 13, 15 and 17-18, these are method claims corresponding to the

computer claimed in claims 2, 5 and 7. They have similar limitations; therefore, claims 13, 15

and 17-18 are rejected under the same rationale.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   Claims 4 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haviv et

al. (WO 99/40520), as applied to claims 1 and 12 above respectively, in view of Parsons, Jr. et al.

(U.S. 6,085,247).

Regarding claim 4, Haviv teaches the invention substantially as claimed, as

aforementioned in claim 1 above, but fails to explicitly teach wherein a predetermined amount of

memory is apportioned on the server when a session begins.

Parsons, however, discloses supporting multiple client-server sessions on a server for network

computers, i.e. thin clients, which separate each session by creating separate containers and

protocol stacks, i.e. predetermined memory, containing the various session information

applicable to each session **[Parsons -- Col. 4 lines 62-67, Col. 6 lines 1-34 and Col. 9 lines 27-56]**.

Both Haviv and Parsons are concerned with allowing clients to establish sessions with a server to allow access applications and software.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the allocation of predetermined memory, i.e. container/stack, on a server, as taught by Parsons into the invention of Haviv, in order to allow multiple sessions to occur simultaneously and separately on a server.

Regarding claim 14, this is a method claim corresponding to the computer claimed in claim 4. It has similar limitations; therefore, claim 14 is rejected under the same rationale.

8.   Claims 6, 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haviv et al. (WO 99/40520), as applied to claims 1 and 12 above respectively, in view of Allen (U.S. 5,909,638).

Regarding claims 6 and 11, Haviv teaches the invention substantially as claimed, as aforementioned in claim 1 above, but fails to teach wherein the display provides approximately 16 million colors (claim 6) with a display driver operating in a 32-bit mode (claim 11). Allen, however, discloses kiosks, i.e. computers, for previewing movies which provide a display adapter operating at 16 million colors (claim 6) along with a video adapter utilizing a 32 bit

(claim 11) decoder for displaying the movies **[Allen -- Col. 3 lines 19-22 and Col. 21 lines 43-50]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of a 32 bit video adapter and 16 million color display, as taught by Allen into the display of Haviv, in order to provide more realistic, colorful and crisp display of text and graphics.

Regarding claim 16, this is a method claim corresponding to the computer claimed in claims 6 and 11. It has similar limitations; therefore, claim 16 is rejected under the same rationale.

9.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Haviv et al. (WO 99/40520), as applied to claim 1 above, in view of Applicants Admitted Prior Art (AAPA).

Regarding claim 8, Haviv teaches the invention substantially as claimed, as aforementioned in claim 1 above, but fails to explicitly teach wherein the server computer controls the display refresh rate process.
AAPA discloses that the display refresh process is controlled through the Windows NT Terminal Server Edition and Citrix MetaFrame software **[AAPA – Specification Page 11 lines 3-9]**. This software was well known and widely used at the time of the applicant's invention to control client sessions on a server. Because this software was in the public's knowledge at the time the

invention was made, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to utilize this software for controlling various aspects of the server

computer, namely display refresh, in order to further provide more centralized management of

server sessions giving the server greater control over client sessions

10.   Claims 9-10 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Haviv et al. (WO 99/40520), as applied to claims 1 and 12 above respectively, in view of LeClair

et al. (U.S. 6,636,891).

Regarding claims 9 and 10, Haviv teaches the invention substantially as claimed, as

aforementioned in claim 1 above, but fails to teach wherein I/O device drivers are resident on

server computer for use during a session (claim 9), upon which server publishes, i.e. downloads,

the I/O device drivers during the session (claim 10).

LeClair, however, discloses a method for controlling I/O devices over the Internet by having the

server store and download I/O driver programs to a client during a connection with the server,

i.e. session **[LeClair -- Col. 5 lines 15-24]**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made

to incorporate the storing (claim 9) and downloading of I/O driver programs from a server to a

client during a session (claim 10), as taught by LeClair into the system of Haviv, in order to

allow for more orderly and centralized management of applications and drivers which would

provide for easier maintenance and upgrading to ensure that each client would have the most up-

to-date driver or application program, rather than having to update each client separately.

Regarding claim 19 and 20, these are method claims corresponding to the computer

claimed in claims 9 and 10. They have similar limitations; therefore, claims 19 and 20 are

rejected under the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thomas J. Mauro Jr. whose telephone number is 703-605-1234.

The examiner can normally be reached on M-F 8:00a.m. - 4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David A. Wiley can be reached on 703-308-5221. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

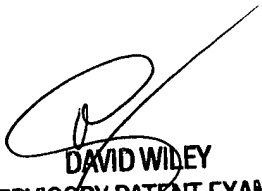system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJM
April 15, 2004

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